Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte CHARLES D. RAY and
ROBERT L. ASSELL

Appeal No. 2001-2516
Application No. 09/286,047

ON BRIEF

Before ABRAMS, CRAWFORD and BAHR, Administrative Patent Judges.

CRAWFORD, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 20, which are all of the claims pending in this application.

The appellant's invention relates to a prosthetic spinal disc nucleus for implantation into a nucleus cavity of a spinal disc and a method of making same. (Specification, page 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art

The prior art references of record relied upon by the examiner in rejecting the appealed claim are:

Bao et al. (Bao)	5,534,028	Jul. 9, 1996
Ray et al. (Ray)	5,824,093	Oct. 20, 1998

The rejections

Claims 1 to 3, 5 to 11 and 20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Ray.

Claims 4, 12 to 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ray.

Claim 19 stand rejected under 35 U.S.C. § 103 as being unpatentable over ray in view of Bao.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 12, mailed February 26, 2001) and the supplemental answer (Paper No. , mailed) for the examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 11, filed December 8, 2000) and reply brief (Paper No. 13, filed April 23, 2001) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the

respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determination which follow.

We turn first to the examiner's rejection of claims 1 to 3, 5 to 11 and 20 under 35 U.S.C. § 102(b). We initially note that to support a rejection of a claim under 35 U.S.C. § 102(b), it must be shown that each element of the claim is found, either expressly described or under principles of inherency, in a single prior art reference. See Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

The examiner states:

> Ray et al. teaches a prosthetic spinal disc nucleus comprising a hydrogel core 12 surrounded by a flexible yet inelastic constraining jacket 14 which allows the core to hydrate to a predetermined generally fixed volume. The prosthetic nucleus is designed such that pressure on the nucleus cavity will deform the presthetic nucleus preventing its volume from increasing to one larger than that of the cavity. The central portion of the presthsis of Ray et al. is generally linear and the height of both the central portion and the leading edge are relatively uniform. [Final rejection, p. 2]

The appellants argue that Ray does not disclose:

> . . . the hydrogel core being configured to have a dehydrated shape in the dehydrated state . . . generally different from the hydrated shape of the hydrated state. . .

as is recited in claim 1. Appellants' argument has two components. Firstly, appellants argue that the hydrogel core in Ray does not have different shapes in the hydrated and dehydrated states. Secondly, appellants argue that Ray does not teach that the hydrogel core itself has different shapes in the dehydrated and hydrated states, and that

if any shape change occurs, it occurs because of the action of the jacket on the hydrogel core 22.

We agree with the examiner that the hydrogel core 22 in Ray does have different shapes in the hydrated and dehydrated conditions. Ray discloses (col. 9, lines to 17 to 20) that once hydrated the oxal spinal disc nucleus will be more circular. In our view this clearly teaches that the disc nucleus has a different shape in the hydrated state than in the dehydrated state.

In regard to the second component of appellants' argument, the appellants' specification discloses that the desired dehydrated and hydrated shape is different from the dehydrated shape (specification, p. 14). As such, we interpret the term "configure" recited in claim 1 to mean that the core is formed or manufactured to have a shape in the hydrated state whcih is different.

Ray teaches that the jacket forces the hydrogel core to become more circular (col. 9, lines 11 to 13).

We turn next to the examiner's rejection of claims 4, 12 and 13 to 18 under 35 U.S.C. § 103 as being unpatentable over Ray. We initially note that the test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. See In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Moreover, in evaluating such references it is proper to take into account not only the specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

In regard to claim 4, the examiner is of the opinion that the specific shapes recited in this claim are an obvious matter of design in the art depending on the possible use. We will not sustain the rejection because Ray does not disclose or suggest a hydrogel core which is configured to have a shape in a hydrated shape which is different from the dehydrated shape as is recited in claim 1 from which claim 4 depends.

In regard to claim 12, the examiner states that the method steps of claim 12 are inherent in the apparatus of Ray as presented above in the 35 U.S.C. § 102 rejection.

The appellants argue that step of reshaping the hydrogel core to have a second shape in the dehydrated shape is not taught or suggested by Ray.

The examiner argues that the claims do not contain the language about "reshaping" the dehydrated shape. This is not true. Claim 12 recites:

> . . . reshaping the hydrogel core to have a second shape in the dehydrated state. . .

In addition, Ray does not disclose or suggest a core which is configured. We agree with the appellants that Ray does not disclose or suggest this reshaping step. As such, we will not sustain this rejection as it is directed to claim 12 or claims 13 to 18 dependent thereon.

We turn next to claim 19 is dependent upon claim 12 we have reviewed the disclosure of Bao and determined that Bao dos not cure the deficiencies noted above for Ray. As such we will not sustain this rejection.

The decision of the examiner is reversed.

REVERSED

NEAL E. ABRAMS Administrative Patent Judge	)
MURRIEL E. CRAWFORD Administrative Patent Judge	) BOARD OF PATENT) APPEALS AND) INTERFERENCES
JENNIFER D. BAHR Administrative Patent Judge	)

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